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Attorney Docket No. BRI/027

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A method of dynamically baselining current modulation-based talkback comprising the following steps:
  - a) establishing an electrically-connected system that includes a master device and at least one slave device that communicates to the master device using current modulation-based talkback;
  - b) causing said master device to periodically measure a baseline level of the talkback current; and,
  - c) causing said master device to thereafter receive talkback compensated according to said measured baseline level of talkback current;

wherein said electrically-connected system includes a bus having a high voltage and a low voltage, and said current modulation-based talkback is performed while said master device holds said bus at said low voltage.
2. (Canceled)
3. (Original) The method of claim 1, wherein step b) includes the step of measuring a baseline level of the digital low value of said talkback.
4. (Canceled)

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5. (Original) The method of claim 1, wherein said current modulation-based talkback includes a serial packet comprising multiple command/data words, and the measurement of step b) is performed at least once for each command/data word.
6. (Original) The method of claim 1, wherein said current modulation-based talkback includes a serial packet that includes a plurality of synchronization bits, and the measurement of step b) is performed on one or more of said synchronization bits.
7. (Original) The method of claim 5, wherein said current modulation-based talkback includes a serial packet that in which a four-bit synchronization sequence "0101" is included with each command/data word, and the measurement of step b) is performed on one or more of said synchronization sequences.
8. (Currently amended) An electrically-connected system for dynamically baselining current modulation-based talkback comprising:
  - a) a master device; [[and,]]
  - b) at least one slave device configured and/or programmed to transmit data to said master device through current modulation-based talkback; and,
  - c) a bus having a high voltage and a low voltage;wherein the system is configured and/or programmed such that the master device periodically measures a baseline level of

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the talkback current and thereafter receives talkback compensated according to said measured baseline level, and wherein said slave device is configured and/or programmed to transmit data to said master device through current modulation-based talkback while said master device holds said bus at said low voltage.

9. (Canceled)
10. (Original) The system of claim 8, wherein the system is configured and/or programmed such that the master device periodically measures a baseline level of the digital low value of the talkback current.
11. (Canceled)
12. (Original) The system of claim 8, wherein said current modulation-based talkback includes a serial packet comprising multiple command/data words, and wherein the system is configured and/or programmed such that said master device performs said periodic baseline measurement at least once for each command/data word.
13. (Original) The system of claim 8, wherein said current modulation-based talkback includes a serial packet that includes a plurality of synchronization bits, and wherein the system is configured and/or programmed such that said master

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device performs said periodic baseline measurement on one or more of said synchronization bits.

14. (Original) The system of claim 12, wherein said current modulation-based talkback includes a serial packet that includes a plurality of synchronization bits, and wherein the system is configured and/or programmed such that said master device performs said periodic baseline measurement on one or more of said synchronization bits.
15. (Currently amended) A master device for use in an electrically connected system including at least one slave device that communicates with said master device through current modulation-based talkback, wherein said master device is configured and/or programmed to periodically measure a baseline level of the talkback current and thereafter receive talkback compensated according to said measured baseline level, wherein said master device is configured and/or programmed to receive said talkback over a bus having a high voltage and a low voltage, and said master device is further configured and/or programmed to hold said bus at said low voltage during said talkback.
16. (Canceled)
17. (Original) The master device of claim 15, wherein said master device is configured and/or programmed to periodically measure

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a baseline level of the digital low value of the talkback current.

18. (Original) The master device of claim 15, wherein said current modulation-based talkback includes a serial packet comprising multiple command/data words, and wherein said master device is configured and/or programmed to perform said periodic baseline measurement at least once for each command/data word.
19. (Original) The master device of claim 15, wherein said current modulation-based talkback includes a serial packet that includes a plurality of synchronization bits, and wherein said master device is configured and/or programmed to perform said periodic baseline measurement on one or more of said synchronization bits.
20. (Original) The master device of claim 15, wherein said master device is configured and/or programmed with an A/D converter or comparator algorithm.
21. (New) The master device of claim 15, wherein said master device is a blasting machine for use in an electronic blasting system that includes a plurality of slave devices that are electronic detonators.
22. (New) The system of claim 8, wherein said system is an electronic blasting system, said master device is a blasting machine, and said slave device is an electronic detonator.

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23. (New) The system of claim 22, wherein said system includes a plurality of electronic detonators.
24. (New) The method of claim 1, wherein said system is an electronic blasting system, said master device is a blasting machine, and said slave device is an electronic detonator.
25. (New) The method of claim 25, wherein said system includes a plurality of electronic detonators.